Santa Fe High School students take first place in the 27th Annual Supercomputing Challenge

April 26, 2017

LOS ALAMOS, N.M., April 26, 2017—Four Santa Fe High School students won first place for their project, “Urban Installation of Smog Reducing Materials,” at the 27th Annual New Mexico Supercomputing Challenge Expo held Tuesday in Albuquerque. In their project, Rowan Cahill, Lisel Faust, Theo Goujon and Ramona Park simulated the effects of using smog-reducing materials on the air quality in a congested city.

“The goal of the yearlong event is to teach student teams how to use powerful computers to analyze, model and solve real-world problems,” said David Kratzer of Los Alamos National Laboratory’s High Performance Computing division and executive director of the Supercomputing Challenge. “Participating students improve their understanding of technology by developing skills in scientific inquiry, modeling, computing, communications and teamwork.”

Second place went to Anna Luisa Batista, Lily Shevitz and Sylvia Holesinger of Los Alamos Middle School for their project, “Adios! Aedes Aegypti.” They created a computer model that simulates the interaction between wild female mosquitoes and genetically modified organism males to fight the Zika disease to see how effectively they control the spread of Zika.

Los Lunas High School students Jen Marie Phifer, Zach Collins and Aaron Martin took third place with their project, “Rattlesnake Hunting Regulation.” They modeled the impact of rattlesnake hunting on rattlesnake populations.

A complete list of all winning student teams is on the New Mexico Supercomputing Challenge webpage. Read all the student reports online.

Scholarships worth more than $10,000 were awarded at the Supercomputing Challenge Expo. Many other awards were distributed, ranging from random $100 gifts for finishing the academic marathon to team prizes for teamwork, programming prowess and environmental impact.

Demonstrations of technology were provided by Sandia National Laboratories, the University of New Mexico and Honeywell Aerospace during the Expo judging event at the Jewish Community Center. Supercomputing Challenge participants toured Ideum, Inc., and Holman’s USA Measurement Technology Center.

A complete list of sponsors and supporters of the Challenge is on the website.

For 27 years, the Challenge has

- excelled in helping state high school graduates go on to college in STEM areas
- improved the information-based economy of the state of New Mexico by promoting computational thinking
- helped middle and high school students meet common core standards with academic excellence in math modeling, science and technical writing
- promoted collegiality and created excellent professional development to a community of educators

About the Supercomputing Challenge

The New Mexico Supercomputing Challenge teaches computational thinking, computer modeling and 21st century skills such as research, teamwork, project management and written and oral communication to middle and high school students throughout the state. Any New Mexico middle-school or high-school student, including home schooled students, are eligible to participate in the Supercomputing Challenge. Students conduct research projects on subjects of their own choosing. This year 58 teams representing 25 schools from around the state submitted final reports in the Supercomputing Challenge.